

REMARKS

Claims 1-15 and 17-27 are now present in this application.

Claims 1, 10, 19 and 20 have been amended, and claim 16 has been cancelled without prejudice or disclaimer of the subject matter contained therein. Reconsideration of the application, as amended, is respectfully requested.

Rejection under 35 USC 103

Claims 1-3, 5, 6, 9-12, 14, 15 and 18-26 stand rejected under 35 USC 103 as being unpatentable over SMITH, U.S. Patent 5,175,525. This rejection is respectfully traversed.

Claims 4 and 13 stand rejected under 35 USC 103 as being unpatentable over SMITH in view of FUSHIMI, U.S. Patent 6,650,218. This rejection is respectfully traversed.

It is noted that SMITH discloses a power transformer having a low profile and low overall volume. The power transformer comprises an insulating enclosure for encapsulating a primary winding wound therein. The insulating enclosure 140 further comprises two portions, a portion 142 corresponding to bobbin 112, shown in FIG. 3A, and a portion 144 which results from overmolding. SMITH suggests using the portion 142, bobbin 112, for winding the winding wire 114 thereon and then form the portion 144 with the overmolding operation. Therefore, in order to produce the primary winding 110, it is necessary to first produce the bobbin 112, then wind the winding wire 114 on the bobbin 112, and finally encapsulate the primary winding 110.

In contrast, in order to produce the transformer of the present application, it is only necessary to first form the coils, and then use the plastic material to wholly encapsulate the coils and directly form the coil module.

Also, the power transformer of SMITH utilizes two portions to encapsulate the coils in two steps. The transformer of the present application, however, utilizes only one portion to wholly encapsulate the coils in only one step.

The structures of the transformers of SMITH and the present application are therefore different. The manufacturing processes of the transformers of SMITH and the present application are also different. Accordingly, the present application can efficiently mass-produce the transformers satisfying certain specifications, while simultaneously reducing the cost of the transformer and accelerating the manufacturing speed while maintaining a high quality product.

It is respectfully submitted that SMITH fails to teach or suggest wholly encapsulating the coils and directly forming the coil module. Accordingly, the prior art utilized by the Examiner would neither teach nor suggest the claims of the present application. Reconsideration and withdrawal of the 35 USC 103 rejection are therefore respectfully requested.

Allowable Subject Matter

Applicants gratefully acknowledge that the Examiner considers claims 7, 8, 16, 17 and 27 to contain allowable subject matter.

Without conceding the appropriateness of the Examiner's rejection, but simply to expedite prosecution, it is noted that the limitations of objected to but allowable claim 16 have been incorporated into independent claim 10. Accordingly, claim 10 and its dependent claims 11-15, 17 and 18, should now be in condition for allowance.

As discussed above, it is noted that the remaining dependent claims 1, 19, and 20, and their dependent claims 2-9 and 21-27, are additional allowable. Accordingly, reconsideration and withdrawal of all rejections and allowance of the application are earnestly solicited.

Conclusion

Favorable reconsideration and an early Notice of Allowance are earnestly solicited.

Because the additional prior art cited by the Examiner has been included merely to show the state of the prior art and has not been utilized to reject the claims, no further comments concerning these documents are considered necessary at this time.

In the event that any outstanding matters remain in this application, the Examiner is invited to contact the undersigned at (703) 205-8000 in the Washington, D.C. area.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37 C.F.R. §§ 1.16 or 1.17; particularly, extension of time fees.

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Respectfully submitted,

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